

## PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference Q.2AF78	FOR FURTHER ACTION <span style="float: right;">See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)</span>	
International application No. PCT/EP 03/04702	International filing date (day/month/year) 29.04.2003	Priority date (day/month/year) 03.05.2002
International Patent Classification (IPC) or both national classification and IPC B60S1/38		
Applicant FEDERAL-MOGUL S.A. et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
 

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.
3. This report contains indications relating to the following items:
  - I  Basis of the opinion
  - II  Priority
  - III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV  Lack of unity of invention
  - V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI  Certain documents cited
  - VII  Certain defects in the international application
  - VIII  Certain observations on the international application

Date of submission of the demand 01.12.2003	Date of completion of this report 05.08.2004
Name and mailing address of the International preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Blandin, B Telephone No. +31 70 340-3858



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP 03/04702

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-11 as originally filed

**Claims, Numbers**

2-13 as originally filed  
1 filed with telefax on 05.02.2004

**Drawings, Sheets**

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP 03/04702**

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).  
*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	1-13
	No: Claims	
Inventive step (IS)	Yes: Claims	1-13
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET

International application No. PCT/EP 03/04702

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents :

D1 : WO-A-02/04269

D2 : US-B-6192546

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document):

A windscreen wiper device (1) comprising an elastic, elongated carrier element, as well as an elongated wiper blade (2) of a flexible material, which can be placed in abutment with a windscreen to be wiped, which wiper blade (2) includes opposing longitudinal grooves (4) on its longitudinal sides, in which grooves spaced-apart longitudinal strips (3) of the carrier element are disposed, wherein neighbouring ends of said longitudinal strips (3) are interconnected by a respective connecting piece (13), which windscreen wiper device (1) comprises a connecting device (7,14,15) for an oscillating wiper arm (8), wherein said oscillating arm is pivotally connected to said connecting device (7,14,15) about a pivot axis near one end.

The subject-matter of claim 1 differs from this known device in that the connecting device being made of a thermoplastic material comprises engaging members being welded to longitudinal sides of the longitudinal strips being made of steel with a thermoplastic skin that face away from each other in such a manner as to withstand shearing forces in a direction along said longitudinal strips.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as how to assemble the connecting device on the wiper blade.

It is already known from D2 (see col.4, lines 58-62) to weld a plastic connector with plastic strips. However, no documents mention longitudinal strips being especially made of steel with a thermoplastic skin in order to enable the welding of the wiper arm connector on them. Therefore, the man skilled in the art wouldn't have come to this special feature. The subject-matter of claim 1 is considered as involving an inventive step (Article 33(3) PCT).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/04702

Claims 2-12 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Claim 13 is a method claim which uses the different elements defined in claim 1. Therefore, the longitudinal strips made of steel with a thermoplastic skin and the connector made of a thermoplastic material are also features of claim 13 and for the same reasons as in claim 1, claim 13 is new and inventive.

Claims 1-13 are industrially applicable in the field of windscreen wiper for vehicles.

Annex to letter dated 5 February 2004 to the European Patent Office concerning international (PCT-) patent application no. PCT/EP03/04702, publication no. WO 03/093079, in the name of Federal-Mogul S.A. - "Windscreen wiper device"

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**AMENDED MAIN CLAIM**

1. A windscreen wiper device (1) comprising an elastic, elongated carrier element, as well as an elongated wiper blade (2) of a flexible material, which can be placed in abutment with a windscreen to be wiped, which wiper blade (2) includes opposing longitudinal grooves (3) on its longitudinal sides, in which grooves spaced-apart longitudinal strips (4) of the carrier element are disposed, wherein neighbouring ends of said longitudinal strips (4) are interconnected by a respective connecting piece (6), which windscreen wiper device (1) comprises a connecting device (7) for an oscillating wiper arm (8), wherein said oscillating arm is pivotally connected to said connecting device (7) about a pivot axis near one end, characterized in that said connecting device (7) being made of a thermoplastic material comprises engaging members (9) being welded to longitudinal sides (10) of said longitudinal strips (4) being made of steel with a thermoplastic skin that face away from each other in such a manner as to withstand shearing forces in a direction along said longitudinal strips (4).

(claims 2-13 as originally filed)

**EPO - DG 1**

**06. 02. 2004**

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